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| APPLICATION NO.  | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO.       | CONFIRMATION NO. |
|--|-------------|----------------------|---------------------------|------------------|
| 10/802,704   | 03/17/2004  | Che-Hsiung Hsu       | UC0362USNA                | 4816             |
| 23906 7590 02/02/2007<br>E I DU PONT DE NEMOURS AND COMPANY<br>LEGAL PATENT RECORDS CENTER<br>BARLEY MILL PLAZA 25/1128<br>4417 LANCASTER PIKE<br>WILMINGTON, DE 19805 |             |                      | EXAMINER<br>KOPEC, MARK T |                  |
|  |             |                      | ART UNIT                  | PAPER NUMBER     |
|  |             |                      | 1751                      |                  |
| SHORTENED STATUTORY PERIOD OF RESPONSE   |             | MAIL DATE            | DELIVERY MODE             |                  |
| 3 MONTHS   |             | 02/02/2007           | PAPER                     |                  |

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

# Office Action Summary

Application No.

10/802,704

Applicant(s)

HSU ET AL.

Examiner

Mark Kopec

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 12 January 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-28 is/are pending in the application.
- 4a) Of the above claim(s) 9-28 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

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A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 01/12/07 has been entered.

Claims 1-28 are currently pending with claims 9-28 withdrawn from consideration.

The ODP rejections are withdrawn in view of the Terminal Disclaimer(s) filed 10/10/06.

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1-8 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the

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claimed invention. Specifically, the specification as filed does not provide for the claimed pH range of "2 to 8". While the instant disclosure provides support for pH values of 1, 3, 4, and 8 (page 21), there is no support for pH of 2.

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 1-8 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over EP 0593111.

Claims 1-8 are rejected under 35 U.S.C. 102(b) as anticipated by, or in the alternative, under 35 U.S.C. 103(a) as obvious over Pickup et al (Electronically conducting cation-exchange polymer...).

These rejections are maintained for the reasons set forth in the Rejection mailed 01/23/06 (pages 7-9).

Applicant's remarks regarding these rejections are noted. Specifically, applicant has amended the instant claims to recite "having a pH in the range of from 2 to 8...".

The examiner respectfully submits that the claimed limitation "having a pH in the range of from 2 to 8..." would be inherent, or at the very least obvious, over the prior art relied upon above. At page 21 of the specification, applicant teaches:

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Aqueous dispersions of polythiophenes of Formula I(a) or Formula I(b) and polymer acid colloids can have a wide range of pH and can be adjusted to typically be between about 1 to about 8, and generally have a pH of about 3-4. It is frequently desirable to have a higher pH, as the acidity can be corrosive. It has been found that the pH can be adjusted using known techniques, for example, ion exchange or by titration with an aqueous basic solution.

The prior art discloses such adjustment(s). Specifically, EP 0593111 discloses (at page 5):

15 It has been established experimentally that the presence of residual persulfate is undesirable when optically clear antistatic layers have to be formed and that the adhesion in wet state to hydrophobic resin supports is impaired thereby. Therefore, following the polymerization process a desalting step is introduced. For example, by known procedures such as dialysis, elektrodialysis, ultrafiltration or treatment with basic or acidic ion exchange resins the persulfate and particularly potassium persulfate is removed.

40 Instead of the free polymeric polyacids applied in conjunction with the polythiophenes it is possible to use mixtures of alkali salts of said polyacids and non-neutralized polyacids, optionally in the presence of monoacids. Free acid groups of the polyanionic polymer may be allowed to react with an inorganic base, e.g. with sodium hydroxide, to obtain a neutral polymer dispersion before coating.

Accordingly, the examiner submits that the prior art teaches "treatment" of acidic compositions by ion exchange or treatment with basic solution in order to render such neutral (or adjust pH).

In view of the foregoing, the above claims have failed to patentably distinguish over the applied art.

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

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A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mark Kopec whose telephone number is (571) 272-1319. The examiner can normally be reached on Monday - Friday from 9:30 AM to 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Douglas McGinty can be reached on (571) 272-1029. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

  
Mark Kopec  
Primary Examiner  
Art Unit 1751

MK

January 30, 2007